

E 400 HYBRID

Supplemental Operating Instructions

Mercedes-Benz

Symbols

Registered trademarks:

- ESP® is a registered trademark of Daimler AG.

The following symbols are used in these Operating Instructions:

⚠ WARNING

Warning notes draw your attention to hazards that endanger your health or life, or the health or life of others.

Environmental note

Environmental notes provide you with information on environmentally aware actions or disposal.

! Notes on material damage alert you to dangers that could lead to damage to your vehicle.

i Practical tips or further information that could be helpful to you.

▶ This symbol indicates an instruction that must be followed.

▶ Several of these symbols in succession indicate an instruction with several steps.

(▷ page) This symbol tells you where you can find more information about a topic.

▷▷ This symbol indicates a warning or an instruction that is continued on the next page.

`Display` This font indicates a display in the multifunction display/COMAND display.

Welcome to the world of Mercedes-Benz

Read the Operator's Manual and this supplement carefully and familiarize yourself with your vehicle before driving it for the first time. For your own safety and a longer vehicle life, follow the instructions and warning notices in the Operator's Manual and supplement. Ignoring them could result in damage to the vehicle or personal injury to you or others.

Vehicle damage caused by failure to follow instructions is not covered by the Mercedes-Benz Limited Warranty.

This supplement contains operation and safety information as well as practical tips for your E 400 HYBRID.

The equipment or product designation of your vehicle may vary depending on:

- Model
- Order
- Country specification
- Availability

This supplement provides information on all the important functions of your vehicle that are either not described or differ from the descriptions in the Operator's Manual. Under no circumstances does the supplement replace the Operator's Manual. This is particularly true for warning notices.

Mercedes-Benz therefore reserves the right to introduce changes in the following areas:

- Design
- Equipment
- Technical features

You cannot, therefore, base any claims on the illustrations or text content in this supplement.

Integral parts of the vehicle include:

- Operator's Manual
- Maintenance Booklet
- Equipment-dependent supplements

Keep these documents in the vehicle at all times. If you sell the vehicle, always pass the documents on to the new owner.

The technical documentation team at Daimler AG wishes you safe and pleasant motoring.

Mercedes-Benz USA, LLC

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Index 4

Introduction 7

At a glance 9

Safety 13

Climate control 17

Driving and parking 19

On-board computer and displays 27

Breakdown assistance 37

Wheels and tires 41

Technical data 45

A

ABS (Anti-lock Braking System)
Function/notes 15
Anti-lock Brake System
see ABS
Authorized Mercedes-Benz Center
see Qualified specialist workshop
Automatic climate control 18
Automatic engine start (ECO start/stop function) 23
Automatic engine switch-off (ECO start/stop function) 22
Automatic transmission
Program selector button 21

B

Battery
Charging 38
High-voltage battery charge level (COMAND) 29
Jump-starting 39
Notes 38
see High-voltage battery
Battery (vehicle)
Display message 33
Brakes
Warning lamp 34
Brake system
see RBS

C

Climate control
Refrigerant 46
Refrigerant filling capacity 47
COMAND
Fuel consumption 31
Generated electricity 31
High-voltage battery charge level 29
Overview 28
Consumption statistics (COMAND)
see Fuel consumption
Cruise control 16

D

Data
see Technical data
Display messages
Calling up (on-board computer) 32
General notes 31
Hiding (on-board computer) 31
DISTRONIC PLUS
Function/notes 16
Driving safety systems
see ABS
see RBS
Driving systems
Cruise control 16
DISTRONIC PLUS 16
Driving tips
Brakes 26
General 25
Points to remember 20

E

ECO start/stop function 22
Electric motor
Power display 28
Electric motor power display 28
Engine
see Internal combustion engine
Engine oil 46
ESP® (Electronic Stability Program)
Warning lamp 35
Exhaustive discharging (high-voltage battery) 38
Extended overrun mode 23

G

Generated electricity (COMAND) 31
Gliding
see Extended overrun mode
see Overrun mode

H

High voltage
see Safety notes
High-voltage battery
Charge level (COMAND) 29
Charging 38
Charging (on-board computer) 29
Exhaustive discharging 38
General safety notes 15
High-voltage battery charge level (COMAND) 29
Hybrid system
Deactivated automatically 15
Overview 10
READY indicator 21

I

Indicator
COMAND display 29
High-voltage battery charge level (COMAND) 29
Multifunction display 29
Indicator lamps
see Warning and indicator lamps
Instrument cluster
Overview 11
Power display 28
Internal combustion engine
Malfunction 24
Starting 21

J

Jump-starting 39

L

Lamps
see Warning and indicator lamps

M

Message memory (on-board computer) 32
Messages
see Warning and indicator lamps
Modifications to the vehicle 7

O

On-board computer
Message memory 32
Overview 28
Operating mode
Boost function 26
Extended overrun mode 23
Overrun mode 23
Stationary vehicle 26
Operating safety 7
Overrun mode 23

P

Parking 25
Program selector button 21
Protection of the environment 7
Pulling away 22

Q

Qualified specialist workshop 7

R

RBS (Recuperative Brake System)
Function/notes 15
Malfunction 24
Warning lamp 34
READY indicator 21
Recharging statistics (COMAND)
see Generated electricity
Refrigerant (air-conditioning system)
Important safety notes 46
Risk of fire
see Safety notes
Roof load (maximum) 47

S

Safety
see Operating safety
Safety notes 14
Service products
Refrigerant (air-conditioning system) 46
Specialist workshop 7

SRS (Supplemental Restraint System)
Warning lamp 25
Start/stop function
see ECO start/stop function
Starting
see Internal combustion engine, starting
Stationary vehicle 26
Stop-start traffic 22
Submenu
COMAND display 28
Multifunction display 28
Resetting values (COMAND) 31
Switching off the engine
see ECO start/stop function

T

Tailgate
Opening dimensions 47
Technical data
Information 46
Vehicle data 47
Tires 43
Towing 39
Trunk lid
Opening dimensions 47
Trunk load (maximum) 47

V

Vehicle
Correct use 8
Parking for a long period 38
Towing 39
Vehicle data 47
Vehicle data 47
Vehicle dimensions 47
Vehicle fire
see Safety notes

W

Warning
Stickers 14
Warning and indicator lamps
Brakes 34
ESC® (yellow) 35
RBS 34
SRS 25
Warning lamps
see Warning and indicator lamps
Wheels 43

Protection of the environment

Environmental note

Have a faulty high-voltage battery removed at a qualified specialist workshop and disposed of in an environmentally responsible manner.

WARNING

The hybrid system operates at high voltage. The hybrid system components are marked with yellow warning stickers. The high-voltage cables are orange in color.

You could be seriously or even fatally injured if you:

- tamper with components or the high-voltage cables of the hybrid system
- touch components or high-voltage cables in the hybrid system of a vehicle which has been involved in an accident
- touch damaged components of the hybrid system

Do not attempt to remove the high-voltage battery of the hybrid system. Have the high-voltage battery disposed of professionally, e.g. at an authorized Mercedes-Benz Center.

Further information on the battery (▷ page 38).

Operating safety

Important safety notes

WARNING

Vehicles with an electric motor generate much less driving noise than vehicles with internal combustion engines. As a result, your vehicle may not be heard by other road users in certain situations, for example when parking or when your vehicle has not been seen by other road users.

This requires you to adopt a particularly anticipatory driving style, as it is necessary to allow for the possibility that other road users may behave erratically.

WARNING

Always have work on the vehicle carried out by a qualified specialist workshop. In particular, work relevant to safety, to safety-related systems, to the hybrid system as well as maintenance work must be carried out at a qualified specialist workshop. The specialist workshop must have the necessary specialist skills and tools to carry out the work required. Mercedes-Benz recommends that you use an authorized Mercedes-Benz Center for this purpose.

For further information about operating safety, see the vehicle Operator's Manual.

Modifications to the vehicle

WARNING

Work carried out incorrectly on the hybrid system or modifications made to your vehicle could cause the systems of your vehicle to cease functioning properly. As a result, there is a risk that you may lose control of your vehicle and thus cause an accident.

Therefore, have all work on the hybrid system and modifications to the vehicle, such as installations or conversions, carried out at a qualified specialist workshop.

For further information about operating safety, see the vehicle Operator's Manual.

Qualified specialist workshop

An authorized Mercedes-Benz Center is a qualified specialist workshop. It has the necessary specialist knowledge, tools and qualifications to correctly carry out the work required on your vehicle. This is especially the case for work relevant to safety.

Observe the notes in the Maintenance Booklet.

Always have the following work carried out at an authorized Mercedes-Benz Center:

- work relevant to safety
- service and maintenance work
- repair work
- alterations, installation work and modifications
- work on electronic components

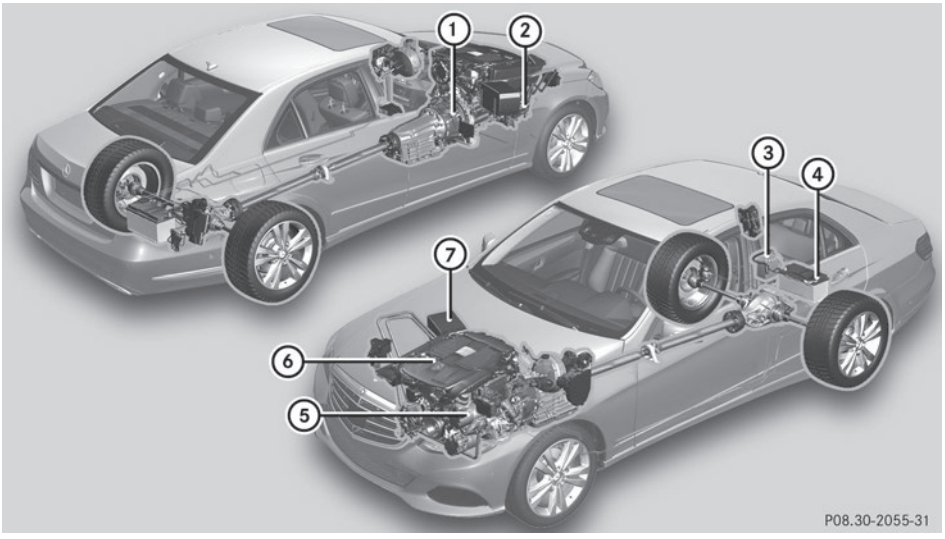
Correct use

Observe the following information when using the vehicle:

- the safety information in this manual
- the safety information in the vehicle Operator's Manual
- the "Technical data" section in this manual and in the vehicle Operator's Manual
- national road traffic regulations
- national road traffic licensing regulations

Hybrid system overview 10
Instrument cluster 11

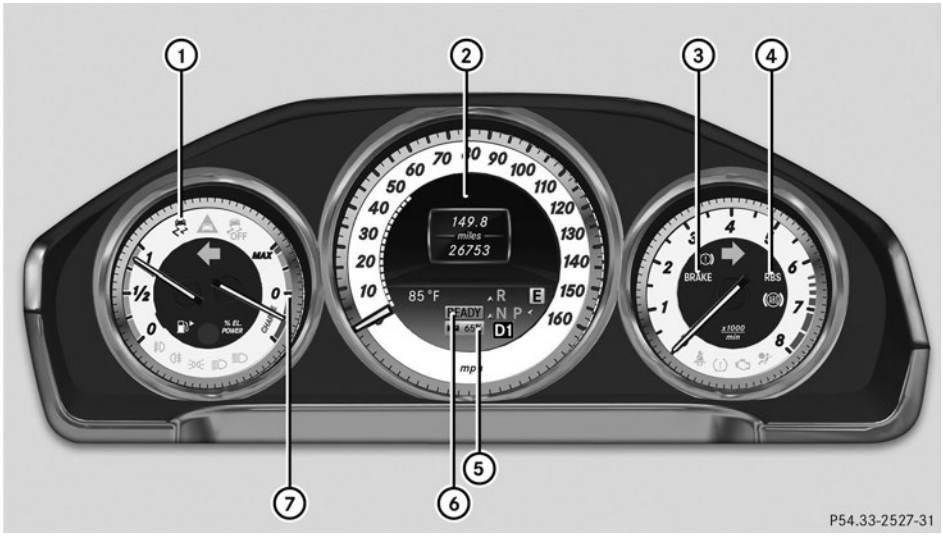
Hybrid system overview



	Function	Page
①	Electric motor	20
②	Power electronics (for the vehicle's high-voltage electrical system)	
③	12V battery (ECO start/ stop function)	38
④	12V battery (starter battery)	38

	Function	Page
⑤	Electrical refrigerant compressor for automatic climate control	18
⑥	Internal combustion engine	20
⑦	High-voltage battery	38

Instrument cluster



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	Function	Page
①	ESP® warning lamp	35
②	Multifunction display	28
③	Brake system warning lamp	34
④	RBS warning lamp	34
⑤	High-voltage battery charge indicator	29

	Function	Page
⑥	READY indicator	21
⑦	Electric motor performance display	28

Useful information 14
Important safety notes 14
Driving safety systems 15
Driving systems 16

Useful information

ⓘ This Operator's Manual describes all models and all standard and optional equipment of your vehicle available at the time of publication of the Operator's Manual. Country-specific differences are possible. Please note that your vehicle may not be equipped with all features described. This also applies to safety-related systems and functions.

ⓘ Read the information on qualified specialist workshops: (▷ page 7).

Important safety notes

Warning sticker

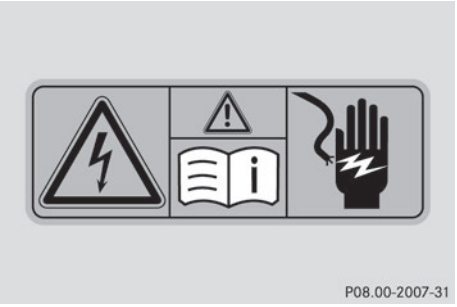
⚠ **WARNING**

Various warning labels are attached to your vehicle. These warning labels are intended to make you and others aware of various risks. Do not remove any of these warning labels unless explicitly instructed to do so by information on the label itself.

Removing warning labels may cause you and others to be unaware of certain risks which may result in an accident and/or personal injury.

Danger of electric shock

The components of the hybrid system are marked with yellow warning stickers that warn you of high voltage. The electrical wires for the vehicle's high-voltage electrical system are orange in color.



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⚠ **WARNING**

The hybrid system operates at high voltage.

You could be seriously or even fatally injured if you:

- tamper with components or the high-voltage cables of the hybrid system
- touch components or high-voltage cables in the hybrid system of a vehicle which has been involved in an accident
- touch damaged components of the hybrid system

Do not remove the hybrid system component covers that are marked with warning stickers. Do not tamper with components or the orange high-voltage cables of the hybrid system.

Engine compartment

Before opening the hood:

- ▶ Apply the parking brake and use the DIRECT SELECT lever to shift the transmission to **P**.
- ▶ Switch the ignition off.
  The green or yellow READY indicator (▷ page 21) in the instrument cluster goes out.
- ▶ Remove the SmartKey from the ignition or remove the KEYLESS GO key from the vehicle.
- ▶ Observe the warning notes in this supplement on the risk of electric shock.
- ▶ Observe the warning notices about the hood (see vehicle Operator's Manual).

Automatic deactivation of the hybrid system

The hybrid system is deactivated automatically if:

- SRS (Supplemental Restraint System) activates the restraint system in an accident
- a short circuit is detected in the hybrid system.
- one of the hybrid system's electrical connections is disconnected.

This ensures that you do not come into contact with high voltage.

High-voltage battery

⚠ **WARNING**

The high-voltage battery in the hybrid system is located on the front bulkhead in the engine compartment on the right-hand side when viewed in the direction of travel. If, e. g. in the event of a vehicle fire, the internal pressure of the high-voltage battery exceeds a certain value, flammable gas escapes through a line in the area of the right front wheel. This prevents the high-voltage battery from exploding.

Leave the danger area. If necessary, set up the warning triangle at a suitable distance. Observe legal requirements.

Driving safety systems

ABS (Anti-lock Braking System)

Braking

If ABS intervenes when braking, the yellow ESP® indicator lamp flashes in the instrument cluster (▷ page 35). You only feel the brake pedal pulsating in certain situations, e.g. on slippery roads.

ⓘ Further information about ABS; (see vehicle Operator's Manual).

RBS (Recuperative Brake System)

RBS supports you when braking with an electronically-controlled brake boost mode and enables the recovery of kinetic energy.

⚠ **WARNING**

Always have work on the RBS system, e.g. replacement of brake pads, carried out at a qualified specialist workshop.

Certain points must be taken into account when carrying out work on the RBS system, e.g. for system restart.

Mercedes-Benz recommends that you use an authorized Mercedes-Benz Center for this purpose. In particular, work relevant to safety or on safety-related systems must be carried out at a qualified specialist workshop.

⚠ **WARNING**

If RBS malfunctions, braking resistance may be reduced and brake pedal travel may be longer than usual. The brake system is still fully functional. If necessary, depress the brake pedal further. Adjust your driving style and vehicle speed accordingly.

ⓘ The first time the brake pedal is depressed after switching on the engine, braking resistance may be reduced and brake pedal travel may be greater than usual. When you release the brake pedal, pedal travel then returns to normal.

Remember the following points about RBS (▷ page 20).

The yellow RBS RBS warning lamp and/or the red BRAKE brake warning lamp light up in the instrument cluster if RBS is malfunctioning. Follow the instructions in the multifunction display (▷ page 31).

ⓘ Further information about the brake system and about driving tips; (see vehicle Operator's Manual).

Driving systems

Cruise control/DISTRONIC PLUS

Cruise control and DISTRONIC PLUS do not depress the brake pedal when slowing the vehicle.

ⓘ For further information on cruise control and DISTRONIC PLUS, see the vehicle Operator's Manual.

Useful information 18
General notes 18

Useful information

This Operator's Manual describes all models and all standard and optional equipment of your vehicle available at the time of publication of the Operator's Manual. Country-specific differences are possible. Please note that your vehicle may not be equipped with all features described. This also applies to safety-related systems and functions.

Read the information on qualified specialist workshops: (▷ page 7).

General notes

When the vehicle is ready for use and the green or yellow READY indicator is lit, the automatic climate control system is available.

If the internal combustion engine has been shut off, the vehicle interior temperature that has been set will be maintained for a certain period of time.

For further information about climate control, see the vehicle Operator's Manual.

Useful information 20
Points to remember 20
Driving 21
Parking 25
Driving tips 25

Useful information

ⓘ This Operator's Manual describes all models and all standard and optional equipment of your vehicle available at the time of publication of the Operator's Manual. Country-specific differences are possible. Please note that your vehicle may not be equipped with all features described. This also applies to safety-related systems and functions.

ⓘ Read the information on qualified specialist workshops: (▷ page 7).

Points to remember

⚠ **WARNING**

When the vehicle is stationary and the green READY indicator in the instrument cluster is lit, this means that the engine has been switched off automatically. All of the vehicle's systems remain active.

If you remove your foot from the brake pedal while in transmission position D or R, the vehicle may pull away automatically.

There is a risk of an accident.

Exit the vehicle only if:

- both the green and yellow READY indicators in the instrument cluster are off
- you have secured the vehicle to prevent it from rolling away.

The hybrid system combines a fuel efficient internal combustion engine with a powerful electric motor. The hybrid system automatically selects the most efficient operating mode for every driving situation. Drive the vehicle in the usual manner.

In order to save fuel, the hybrid system switches the engine off as often as possible, whenever less power output is required as you drive. The electric motor provides the propulsion. The engine is switched on, even while the vehicle is in motion, when a higher power output is required. The engine is usually switched off when the vehicle is stationary. The typical idling of conventional engines is therefore generally absent.

For the high-consumption tasks of pulling away and accelerating, the electric motor assists the internal combustion engine using the stored energy from the high-voltage battery. This energy is also used for driving in partially electric mode (▷ page 25), to operate the electric refrigerant compressor and support the 12V on-board electrical system. In this manner, the hybrid drive makes a crucial contribution to fuel conservation.

Notes on driving and parking (▷ page 21).

You can display the hybrid system's current operating mode in the multifunction display and the COMAND display (▷ page 28).

In the COMAND display, you can also call up a graphic display of the fuel consumption and generated electricity (▷ page 31).

RBS

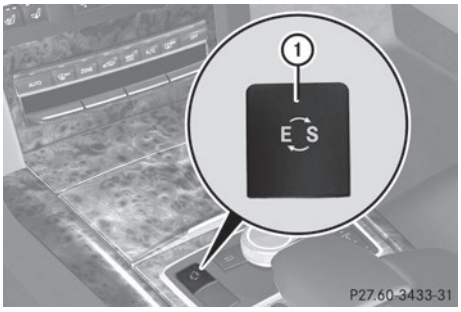
RBS (▷ page 15) uses the electric motor as a generator in overrun mode (▷ page 23) and when braking. The hybrid system converts the kinetic energy of the vehicle into electricity and stores it in the high-voltage battery. It is unnecessary to additionally charge the high-voltage battery via an external power system.

Driving

Automatic transmission

Program selector button

Drive programs



▶ Press program selector button ① repeatedly until the letter for the desired gearshift program appears in the multifunction display.

Common driving characteristics of the individual drive programs:

- Boost function (▷ page 26)
- Recuperation (▷ page 15)

Special driving characteristic of the drive program:

E Economy	• Electric operation mode is used as often as possible • The ECO start/stop function is available • Noiseless start • Overrun mode
S Sport	• Sporty driving style with boost mode • Electric-only operation is not possible • The ECO start/stop function is not available

ⓘ For further information about the automatic drive program, see the vehicle Operator's Manual.

Briefly in manual drive program M

Using the left steering wheel paddle shifter you can briefly shift to manual drive program **M**. The transmission must be in position **D**.

Activating when driving with the electric motor

▶ Pull the left-hand steering wheel paddle shifter.
The combustion engine is switched on. Manual drive program **M** is temporarily activated. The selected gear and **M** appear in the multifunction display.

ⓘ If drive program **M** is not active, pulling on the right-hand steering wheel paddle shifter switches to overrun mode.

Activating when driving with the combustion engine

▶ Pull the left-hand steering wheel paddle shifter.
Manual drive program **M** is temporarily activated. The selected gear and **M** appear in the multifunction display.

Manual drive program **M** is characterized by the following:

M Manual	• Manual gear shifting • Electric-only operation is not possible • The ECO start/stop function is not available

Starting the engine

⚠ **WARNING**

Vehicles with an electric motor generate much less driving noise than vehicles with internal combustion engines. As a result, your vehicle may not be heard by other road users in certain situations, for example when parking or when your vehicle has not been seen by other road users.

This requires you to adopt a particularly anticipatory driving style, as it is necessary to allow for the possibility that other road users may behave erratically.



▶ Switch on the ignition.

▶ Start the vehicle.
READY indicator ① lights up in the multifunction display. The vehicle is ready to drive.

▶ Depress the brake pedal and select a gear.

ⓘ The first time the brake pedal is depressed, braking resistance is reduced and brake pedal travel is greater than usual.

Noiseless start

When you start the vehicle, electric operation mode can be used. The engine starts up when the power required by the driver exceeds the power currently available from the electric motor.

Noiseless start is dependent on the outside temperature and the operating temperature of the hybrid system.

If the hybrid system has been started using noiseless start, green READY indicator ① lights up in the multifunction display.

Pulling away

If you are depressing the brake pedal when shifting the transmission from **P** to **D** or **R** and still see the `Apply Brake to Shift from 'P'` display message in the multifunction display:

▶ Depress the brake pedal more firmly and select the desired transmission position.

ⓘ For further information about pulling away, see the vehicle Operator's Manual.

ECO start/stop function

Important safety notes

⚠ WARNING

When the vehicle is stationary and the green READY indicator in the instrument cluster is lit, this means that the engine has been switched off automatically. All of the vehicle's systems remain active.

If you remove your foot from the brake pedal while in transmission position D or R, the vehicle may pull away automatically.

There is a risk of an accident.

Exit the vehicle only if:

- both the green and yellow READY indicators in the instrument cluster are off
- you have secured the vehicle to prevent it from rolling away.

General notes

The ECO start/stop function automatically switches off the engine at higher speeds (▷ page 23) and when the vehicle comes to a stop.

The ECO start/stop function is only available in drive program **E**.

The system is operational when READY indicator ① turns green in the multifunction display.

All vehicle systems remain active, e.g. the automatic climate control.

Automatic engine switch-off

The engine is switched off automatically, including when:

- the driver releases the accelerator pedal and does not exceed a speed of 90 km/h (140 km/h) (▷ page 23) or
- the engine has reached its operating temperature
- the driver's seat belt is fastened and the driver's door is closed
- the driver only slightly depresses the accelerator pedal
- the hood is closed and engaged properly

- the high-voltage battery is charged sufficiently
- there are no malfunctions in the hybrid system

Yellow READY indicator ① may still appear in the multifunction display, even if all conditions for automatic engine switch-off are met. Continue to maintain a speed above 15 mph (20 km/h) until READY indicator ① turns green in the multifunction display.

If all the conditions for automatic engine switch-off have not been fulfilled, yellow READY indicator ① lights up. The internal combustion engine will not be switched off automatically, if:

- the self-diagnosis function of the engine control unit is still active
- the temperature of the coolant or catalytic converter is too low
- there is a malfunction in the hybrid system
- the climate control of the vehicle requires it
- the high-voltage battery is being charged (▷ page 29)
- the vehicle has rolled back shortly beforehand
- automatic emissions tests are running

Automatic engine start

The automatically switched-off internal combustion engine starts automatically in certain situations, if:

- you demand more power than the electric motor can provide by depressing the accelerator pedal
- the condition of charge of the high-voltage battery has reached the lower limit
- the settings of the automatic climate control require it, e.g. at high outside temperatures above 86°F (30 °C)

Overrun mode

The engine is switched off and disconnected from the drive train. The electric motor operates as a generator to produce the power required for the auxiliary consumers and charges the high-voltage battery.

Overrun mode is available in the speed range below 90 mph (140 km/h).

Extended overrun mode

Overrun mode allows you to increase the vehicle range.

When the vehicle is in overrun mode:

▶ Pull the right-hand steering wheel paddle shifter.
Recuperation is reduced so that only the power supply for the auxiliary consumers currently operating is covered. The high-voltage battery is not being charged.

You can tell that recuperation is no longer operating at full capacity by looking at the power display for the electric motor (▷ page 28).

In this operating mode, the vehicle decelerates less rapidly than a conventional vehicle.

This function is deactivated again if:

- the engine starts up
- you depress the brake pedal
- you pull the left-hand steering wheel paddle shifter

Problems with the engine

Problem	Possible causes/consequences and ▶ Solutions
You cannot start the internal combustion engine. The multifunction display shows no display messages. The READY indicator in the multifunction display is off.	For example, the self-diagnosis is not yet complete or the hybrid system is malfunctioning. ▶ Switch off the ignition and turn it back on. ▶ Try to start the internal combustion engine again. ▶ If the internal combustion engine does not start, consult a qualified specialist workshop.
You wish to pull away and the ECO start/stop function does not start the internal combustion engine. The READY indicator in the multifunction display is off.	The ECO start/stop function may be malfunctioning. The warning and indicator lamps in the instrument cluster light up. ▶ Shift the transmission to **P**. ▶ Switch off the ignition and turn it back on. ▶ Start the engine.
	The hybrid system is malfunctioning. ▶ Consult a qualified specialist workshop.

Problems with RBS (Recuperative Brake System)

Problem	Possible causes/consequences and ▶ Solutions
Braking resistance is reduced and brake pedal travel is longer than usual.	RBS system test required. The first time the brake pedal is depressed after switching on the engine, braking resistance is reduced and brake pedal travel is greater than usual. When you release the brake pedal, pedal travel then returns to normal.
	⚠ **Risk of accident** RBS is malfunctioning. ▶ Observe any additional display messages in the multifunction display (▷ page 31) and the indicator and warning lamp messages in the instrument cluster (▷ page 34).
The brake pedal pulsates.	RBS assists you when braking with an electronically-controlled brake boosting effect. ▶ Observe the notes on the ESP® warning lamp (▷ page 35).

Problem with the hybrid system

Problem	Possible causes/consequences and ▶ Solutions
The hybrid system was deactivated automatically.	Your vehicle has been involved in an accident. The hybrid system remains deactivated if: • you cannot restart the internal combustion engine after several seconds. • red SRS warning lamp in the instrument cluster is lit. ▶ Consult a qualified specialist workshop.
The hybrid system was deactivated automatically. The multifunction display also shows a display message.	An electrical short circuit has occurred in the hybrid system or one of the hybrid system's electrical connections has been disconnected. ▶ Observe the additional display messages in the multifunction display (▷ page 31). ▶ Consult a qualified specialist workshop.

Parking

⚠ WARNING

Vehicles with an electric motor generate much less driving noise than vehicles with internal combustion engines. As a result, your vehicle may not be heard by other road users in certain situations, for example when parking or when your vehicle has not been seen by other road users.

This requires you to adopt a particularly anticipatory driving style, as it is necessary to allow for the possibility that other road users may behave erratically.

⚠ WARNING

When the vehicle is stationary and the green READY indicator in the instrument cluster is lit, this means that the engine has been switched off automatically. All of the vehicle's systems remain active.

If you remove your foot from the brake pedal while in transmission position D or R, the vehicle may pull away automatically.

There is a risk of an accident.

Exit the vehicle only if:

- both the green and yellow READY indicators in the instrument cluster are off
- you have secured the vehicle to prevent it from rolling away.

▶ Apply the parking brake.
The red BRAKE indicator lamp in the instrument cluster lights up.

▶ Use the DIRECT SELECT lever to shift the transmission to **P**.

▶ Switch the ignition off.
The green or yellow READY indicator in the instrument cluster goes out.

ⓘ For further information about parking and switching off the internal combustion engine, see the vehicle Operator's Manual.

Driving tips

Driving at optimum consumption

- Drive carefully and maintain a safe distance from the vehicle in front.
- Avoid frequent and sudden acceleration as well as abrupt braking.

- During partial electric driving, pulling away and acceleration, the electric motor supports the internal combustion engine.
- During overrun in transmission position **D** and braking, the electric motor will operate as a generator.

For further information about the ECO start/stop function (▷ page 22) and driving tips, see the vehicle Operator's Manual.

Stationary vehicle

In this operating mode, the internal combustion engine is primarily switched off. Electric drive from the refrigerant compressor ensures that the automatic climate control system continues to operate. The electromechanically assisted steering gear allows you to use the power steering without reduced comfort.

Acceleration/boost function

Depending on the drive program and accelerator pedal position, the vehicle drives in pure electric mode or in combination with the engine. The boost function is used when accelerating or driving at increased or full load. The electric motor assists the engine by providing extra torque whenever the accelerator pedal is depressed quickly.

Overrun mode or braking

When decelerating your hybrid vehicle, three operating conditions are possible:

- energy recovery (▷ page 23) takes place even when the vehicle is decelerating purely in overrun mode. The electric motor operates as a generator and stores the recovered energy in the high-voltage battery.
- when the brakes are applied lightly, the vehicle is slowed down further by the electric motor. This increases the energy recovery taking place. The electric motor operates as a generator and stores the recovered energy in the high-voltage battery.
- during heavy braking, the service brake is also used to slow down the vehicle. The two systems work together.

Urban driving

The advantages of the hybrid vehicle come especially clearly into play when driving in the city. Energy is recovered during the vehicle's frequent braking.

The vehicle operates exclusively with the electric motor at speeds of up to approximately 20 mph (35 km/h), for example:

- while approaching a traffic light
- in stop-start traffic

The vehicle operates exclusively with the electric motor only if all conditions for automatic engine switch-off are met (▷ page 22).

Driving on inter-urban roads

When driving on inter-urban roads, the vehicle switches between boost phase, constant phase and energy recovery phase.

A great deal of recovered energy may be available, depending on the route profile. This has a positive effect on fuel consumption and emissions.

Highway driving

When driving on a highway, the decrease in wasted power through recuperation has a particularly positive effect on fuel consumption and emissions.

Useful information 28
Displays and operation 28
Menus and submenus 28
Display messages 31
Warning and indicator lamps in the instrument cluster 34

Useful information

ⓘ This Operator's Manual describes all models and all standard and optional equipment of your vehicle available at the time of publication of the Operator's Manual. Country-specific differences are possible. Please note that your vehicle may not be equipped with all features described. This also applies to safety-related systems and functions.

ⓘ Read the information on qualified specialist workshops: (▷ page 7).

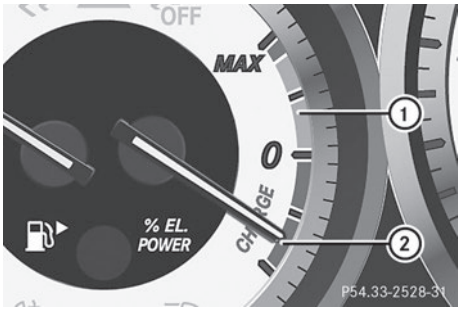
Displays and operation

Coolant temperature display

The coolant temperature can only be called up on the on-board computer.

- ▶ Press ◀ or ▶ on the steering wheel to select the Serv. menu.
- ▶ Press ▲ or ▼ to select Coolant.

Electric motor performance display



The electric motor power display in the instrument cluster shows:

- how much of the maximum available electric motor output is currently being used
- how much electrical energy is being delivered through recuperation

Upper area ① shows the output obtained from the electric motor, e.g. when driving using the electric motor or with the boost function. During electric drive, the engine starts up when the display reaches the "MAX" mark at the top. This allows you to control how much the electric drive is used at low speeds.

Lower area ② shows the recuperated output which is stored in the high-voltage battery as electrical energy. When the indicator reaches the mark at the bottom, this means that the recuperative braking power has been fully utilized. The service brake is activated.

Operating the on-board computer

ⓘ For information about operating the on-board computer and COMAND, see the vehicle Operator's Manual.

You can display the current operating mode of the hybrid system in the multifunction display and the COMAND display.

In the COMAND display, you can also call up a graphic display of the fuel consumption and generated electricity (▷ page 31).

Menus and submenus

Selecting a submenu in the multifunction display

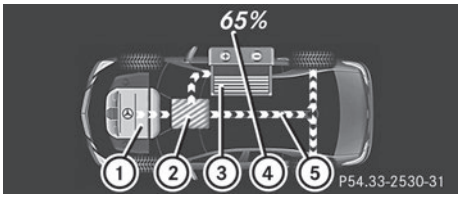
- ▶ Press the ◀ or ▶ button on the steering wheel to select the Trip menu.
- ▶ Press ▲ or ▼ to select Energy Flow.

Selecting a submenu in the COMAND display

- ▶ **To call up the full screen display:** press the SYS button.
  The clock is shown in the COMAND display
- ▶ Slide ⬆◎ the COMAND controller up until the Full Screen option is selected.

- ▶ Press ⊛ the COMAND controller.
  The system display is shown as full screen (without system menu).
- ▶ Slide ←◎→ or turn ❴◎❵ the COMAND controller until the desired display appears.
- ▶ **To exit the full-screen display:** press ⊛ the COMAND controller.
  The system menu appears.

Displays in the multifunction display and in the COMAND display



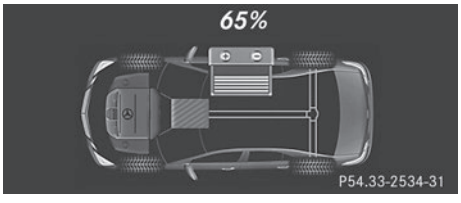
Example: information in the COMAND operating mode display

① Internal combustion engine
② Electric motor
③ High-voltage battery
④ High-voltage battery condition of charge
⑤ Energy flow

ⓘ You can view the current operating mode in the multifunction display and the COMAND display. The active hybrid components are highlighted.

Operating mode in the multifunction display and in the COMAND display

Automatic engine switch-off

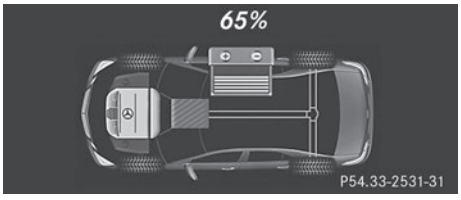


Example: COMAND display

The engine and electric motor are switched off. The arrows indicating energy flow are not shown.

ⓘ The condition of charge for the high-voltage battery is shown only when the SmartKey is in position **2** in the ignition.

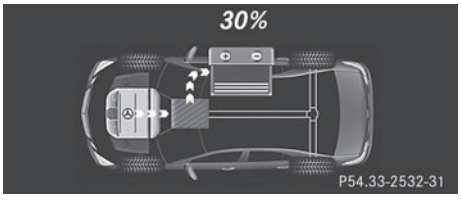
Engine running while vehicle is stationary



Example: COMAND display

The engine is running while the vehicle is stationary. The high-voltage battery is not being charged. The engine is highlighted in the multifunction display and the COMAND display.

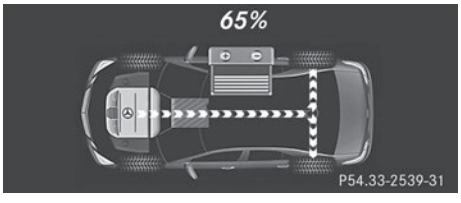
Charging while vehicle is stationary



Example: COMAND display

The engine powers the electric motor. The electric motor operates as a generator. The high-voltage battery is being charged.

Driving using the engine

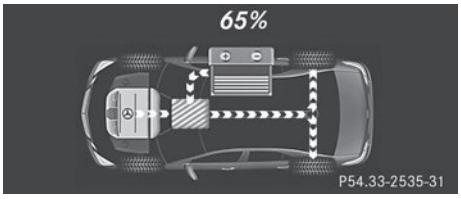


Example: COMAND display

The engine powers the vehicle.

The arrows for the energy flow are shown in white.

Driving using the engine plus boost mode

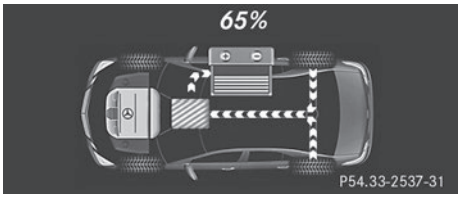


Example: COMAND display

If you depress the accelerator pedal quickly, the electric motor assists the engine by providing extra torque.

The arrows indicating energy flow are red.

Driving using the engine plus energy recovery



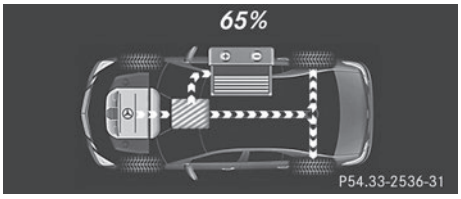
Example: COMAND display

The engine powers the vehicle.

The electric motor is operating as a generator, e.g. in overrun mode and when braking (▷ page 26). The kinetic energy of the vehicle is converted into electrical energy and stored in the high-voltage battery.

The arrows for the energy flow turn green.

Driving using the engine while charging the high-voltage battery

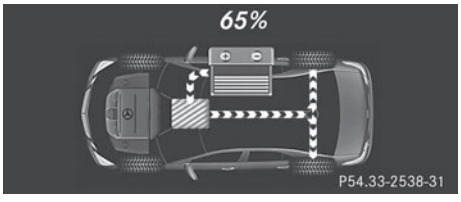


Example: COMAND display

The engine powers the vehicle. The engine also powers the electric motor. The electric motor operates as a generator. The high-voltage battery is being charged.

The arrows for the energy flow are shown in white.

Electric drive

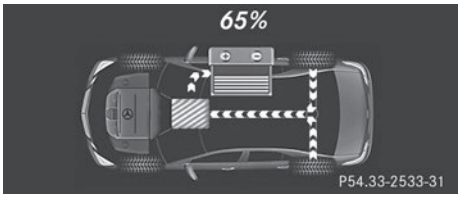


Example: COMAND display

The electric motor powers the vehicle. The high-voltage battery supplies energy to the electric motor.

The arrows for the energy flow turn green.

Electric drive while charging the high-voltage battery



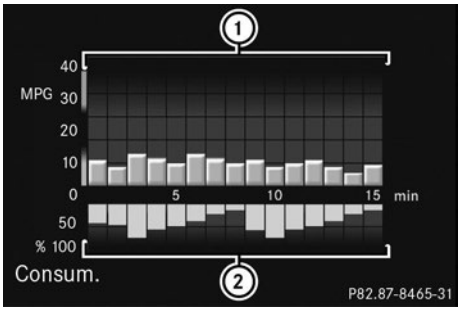
Example: COMAND display

The electric motor is operating as a generator, e.g. in overrun mode and when braking. The kinetic energy of the vehicle is

converted into electrical energy and stored in the high-voltage battery.

The arrows for the energy flow turn green.

Displaying fuel consumption and generated electricity



① Fuel consumption

② Electrical energy generated

▶ **To call up the full screen display:** press the SYS button.
The clock is shown in the COMAND display

▶ Slide the COMAND controller up until the Full Screen option is selected.

▶ Press the COMAND controller.
The system display is shown as full screen (without system menu).

▶ Slide or turn the COMAND controller until the fuel consumption indicator appears.
The COMAND display shows fuel consumption and generated electricity for the past fifteen minutes of driving.

▶ **To exit the full-screen display:** press the COMAND controller.
The system menu appears.

Each bar in the graphic display shows the average value for 1 minute.

Fuel consumption indicator ① may differ from the indicator in the trip computer From Start in the Trip menu.

Resetting values

The values and the From Start trip computer will be reset (see the vehicle Operator's Manual).

Display messages

General notes

Display messages appear in the multifunction display.

Display messages with graphic displays may be shown in simplified form in the Operator's Manual and may differ from the messages shown in the multifunction display.

Respond in accordance with the display messages and observe the additional notes in this supplement and the vehicle Operator's Manual.

Certain display messages are accompanied by an audible warning tone or a continuous tone.

When you stop and park the vehicle, please observe the notes on:

- the HOLD function (see vehicle Operator's Manual)
- parking (see vehicle Operator's Manual)

The following summarizes the hybrid system display messages. You can find the remaining display messages in the vehicle Operator's Manual.

Hiding display messages

You can hide some display messages with a low priority.

▶ Press the OK or button on the steering wheel to hide the display message.
The display message is cleared.

Display messages with a high priority are shown in red.

You cannot hide display messages of the highest priority. The multifunction display shows these messages continuously until the

causes for the messages have been remedied.

Message memory

The on-board computer saves certain display messages in the **message memory**. You can call up the display messages:

- Press the ◀ or ▶ button on the steering wheel to select the Serv. menu. If there are display messages, the multifunction display shows 2 Messages, for example.
- Press the ▲ or ▼ button to select the entry, e.g. 2 Messages.
- Press OK to confirm.
- Press the ▲ or ▼ button to scroll through the display messages.

When the ignition is switched off, all display messages are deleted, apart from some high-priority display messages. Once the causes of the high-priority display messages have been rectified, the corresponding display messages are also deleted.

Internal combustion engine

Display messages	Possible causes/consequences and ▶ Solutions
 Malfunction	The hybrid system is malfunctioning. ▶ Visit a qualified specialist workshop.
	The battery is not being charged. A warning tone also sounds. Possible causes are: • faulty power electronics • a torn poly-V-belt • a malfunction in the electronics ▶ Pull over and stop the vehicle safely and switch off the engine, paying attention to road and traffic conditions. ▶ Secure the vehicle to prevent it from rolling away. ▶ Open the hood. ▶ Check whether the poly-V-belt is torn.

Vehicle

Display messages	Possible causes/consequences and ▶ Solutions
 Malfunction	The drive system is malfunctioning. The ECO start/stop function may not be working and the vehicle may accelerate more slowly than usual. ▶ Visit a qualified specialist workshop.

Warning and indicator lamps in the instrument cluster

Problem	Possible causes/consequences and ▶ Solutions
RBS The yellow RBS (recuperative brake system) warning lamp is on. In addition, there may be a warning tone.	⚠ **Risk of accident** RBS is malfunctioning. Pedal travel may be longer than usual and braking performance may be affected. The automatic engine switch-off function may also be deactivated. ▶ Observe any display messages shown in the multifunction display (▷ page 31). ▶ Drive on carefully. ▶ Visit a qualified specialist workshop.
BRAKE The red brake system warning lamp is on. A warning tone also sounds.	⚠ **Risk of accident** RBS is malfunctioning. Pedal travel may be longer than usual and braking performance may be affected. ▶ Pull over and stop the vehicle safely as soon as possible, paying attention to road and traffic conditions. Do not continue driving under any circumstances. ▶ Consult a qualified specialist workshop immediately. ▶ Observe the additional messages in the multifunction display (▷ page 31) (see vehicle Operator's Manual). ⚠ **Risk of accident** There is not enough brake fluid in the brake fluid reservoir. ▶ Pull over and stop the vehicle safely as soon as possible, paying attention to road and traffic conditions. Do not continue driving under any circumstances. ▶ Consult a qualified specialist workshop immediately. ▶ Observe the additional messages in the multifunction display (see vehicle Operator's Manual). Do not add brake fluid. This does not correct the malfunction.

Problem	Possible causes/consequences and ▶ Solutions
 The yellow ESP® warning lamp flashes while the vehicle is in motion.	⚠ **Risk of accident** ESP®, traction control or ABS has intervened because there is a risk of skidding or at least one wheel has started to spin. Cruise control or DISTRONIC PLUS is deactivated. ▶ When pulling away, only depress the accelerator pedal as far as necessary. ▶ Release the accelerator pedal while the vehicle is in motion. ▶ Adapt your driving style to suit the road and weather conditions. ▶ Do not deactivate ESP®. Exceptions (see vehicle Operator's Manual).
The warning and indicator lamps do not light up in the instrument cluster after switching on the ignition.	The 12V battery is discharged. ▶ Jump-start your vehicle with the help of a second vehicle (▷ page 39). or ▶ Charge the 12V battery (▷ page 38). or ▶ Consult a qualified specialist workshop.

Useful information 38
Batteries 38
Jump-starting 39
Towing 39

Useful information

i This Operator's Manual describes all models and all standard and optional equipment of your vehicle available at the time of publication of the Operator's Manual. Country-specific differences are possible. Please note that your vehicle may not be equipped with all features described. This also applies to safety-related systems and functions.

i Read the information on qualified specialist workshops: (▷ page 7).

Batteries

Important safety notes

⚠ **WARNING**

The electrolyte of the high-voltage battery is poisonous and corrosive. Avoid contact with the skin, eyes or clothing, e.g. in the event of an accident.

Immediately rinse electrolyte splashes off thoroughly with plenty of clean water. Consult a doctor immediately.

! Exhaustive discharge caused by the vehicle standing idle for lengthy periods can damage the high-voltage battery.

If the vehicle is idle for lengthy periods, run it for a few minutes once every six weeks to charge up the high-voltage battery.

During the charging process, switch off all electrical consumers, e.g. the automatic climate control or the seat heating.

Your vehicle is equipped with two 12V batteries and one high-voltage battery. The high-voltage battery stores the energy for the electric motor. The engine can be started using the electric motor.

Have any work on the batteries carried out at a qualified specialist workshop.

i Observe the safety information (▷ page 14) and information about the 12V battery (see the vehicle Operator's Manual).

Installation locations of the 12V and high-voltage batteries (▷ page 10).

Consult an authorized Mercedes-Benz Center if you wish to leave your vehicle parked for a long period of time.

High-voltage battery

⚠ **WARNING**

Never leave the engine running in enclosed spaces. The exhaust gases contain toxic carbon monoxide. Breathing in exhaust fumes is a health hazard and can lead to unconsciousness or death.

! Charge the high-voltage battery only in "Charging while stationary" mode. Do not connect any battery chargers to the high-voltage battery. This could damage the vehicle's high-voltage electrical system.

▶ Bring the vehicle to a stop with the engine running.
The engine powers the electric motor. The electric motor operates as a generator. The high-voltage battery is being charged.

i In the "Charging when stationary" operating mode, the high-voltage battery can be charged to a maximum of 70%. You can monitor the condition of charge of the high-voltage battery in the COMAND display and in the multifunction display (▷ page 29).

Charging the 12 V battery

i Observe the safety information and information on charging the 12 V battery in the vehicle Operator's Manual.

Jump-starting

For information about jump-starting, see the vehicle Operator's Manual.

If jump-starting was used to start your vehicle, electric drive mode may not be available for approximately 30 minutes.

Towing

Towing the vehicle with the rear axle raised

Towing the vehicle with the rear axle raised should only be carried out by professional recovery companies.

When towing the vehicle with the rear axle raised, observe the safety notes and information in the vehicle Operator's Manual.

Towing a vehicle with both axles on the ground

Hybrid vehicles may not be towed away with both axles on the ground.

Have the vehicle towed away by a professional recovery company. The vehicle may only be loaded up and transported or towed away with the rear axle raised.

Only when towing the vehicle away from an area of danger may it be towed with both axles on the ground. In this case, the towing distance must not be greater than 150 ft (50 m) and must not exceed a towing speed of 6 mph (10 km/h).

Transporting the vehicle

Transportation of the vehicle only be carried out by professional recovery companies.

When transporting the vehicle, observe the important safety notes and information in the vehicle Operator's Manual.

Useful information 42
Wheel and tire combinations 43

Useful information

This Operator's Manual describes all models and all standard and optional equipment of your vehicle available at the time of publication of the Operator's Manual. Country-specific differences are possible. Please note that your vehicle may not be equipped with all features described. This also applies to safety-related systems and functions.

Read the information on qualified specialist workshops: (▷ page 7).

Wheel and tire combinations

Points to remember

For further information about wheels and tires, see the vehicle Operator's Manual.

Tires

Depending on the country, engine and wheels fitted, your vehicle may be equipped with TIREFIT or with MOExtended tires (tires featuring run-flat characteristics).

The specified tire pressure is printed in yellow on the emergency spare wheel.

Summer tires

R18

Tires	Alloy wheels
BA: 245/40 R18 97 Y XL[1]	FA: 8.5 J x 18 H2 Wheel offset: 1.89 in (48 mm)
FA: 245/40 R18 97 Y XL[1] RA: 265/35 R18 97 Y XL[1]	FA: 8.5 J x 18 H2 Wheel offset: 1.89 in (48 mm) RA: 9.0 J x 18 H2 Wheel offset: 2.13 in (54 mm)

All-weather tires

R17

Tires	Alloy wheels
BA: 245/45 R17 99 H XL M+S[1]	BA: 8.0 J x 17 H2 Wheel offset: 1.89 in (48 mm)
BA: 245/45 R17 95 H XL M+SMOExtended[2]	BA: 8.0 J x 17 H2 Wheel offset: 1.89 in (48 mm)
BA: 245/45 R17 99 H XL M+S[1]	BA: 8.5 J x 17 H2 Wheel offset: 1.89 in (48 mm)
BA: 245/45 R17 95 H XL M+SMOExtended[2]	BA: 8.5 J x 17 H2 Wheel offset: 1.89 in (48 mm)

1 Canada only.

2 MOExtended tires (tires with run-flat properties).

R18

Tires	Alloy wheels
BA: 245/40 R18 97 V XL M+S[1]	BA: 8.5 J x 18 H2 Wheel offset: 1.89 in (48 mm)
FA: 245/40 R18 97 V XL M+S[1] RA: 265/40 R18 97 V XL M+S[1]	FA: 8.5 J x 18 H2 Wheel offset: 1.89 in (48 mm) RA: 9.0 J x 18 H2 Wheel offset: 2.13 in (54 mm)

Winter tires

R17

Tires	Alloy wheels
BA: 245/45 R17 99 H XL M+S [1]	BA: 8.0 J x 17 H2 Wheel offset: 1.89 in (48 mm)
BA: 245/45 R17 99 V XL M+S MOExtended[2]	BA: 8.0 J x 17 H2 Wheel offset: 1.89 in (48 mm)
BA: 245/45 R17 99 H XL M+S [1]	BA: 8.5 J x 17 H2 Wheel offset: 1.89 in (48 mm)
BA: 245/45 R17 99 V XL M+S MOExtended[2]	BA: 8.5 J x 17 H2 Wheel offset: 1.89 in (48 mm)

R18

Tires	Alloy wheels
BA: 245/40 R18 97 H XL M+S [1]	BA: 8.5 J x 18 H2 Wheel offset: 1.89 in (48 mm)

1 Canada only.

2 MOExtended tires (tires with run-flat properties).

Useful information 46
Information on the technical data 46
Service products and filling capacities 46
Vehicle data 47

Useful information

ⓘ This Operator's Manual describes all models and all standard and optional equipment of your vehicle available at the time of publication of the Operator's Manual. Country-specific differences are possible. Please note that your vehicle may not be equipped with all features described. This also applies to safety-related systems and functions.

ⓘ Read the information on qualified specialist workshops: (▷ page 7).

Information on the technical data

ⓘ The data stated here specifically refers to a vehicle with standard equipment. Consult an authorized Mercedes-Benz Center for the data for all vehicle variants and trim levels.

Service products and filling capacities

Engine oil

Points to remember

Only engine oils approved by Mercedes-Benz may be used in Mercedes-Benz engines (for further information see the vehicle Operator's Manual).

Model	Engine model	MB Approval
E 400 HYBRID	276	229.5

Filling capacities

The following values refer to an oil change including the oil filter.

Engine with oil filter	
Capacity	6.9 US qt (6.5 l)

Climate control system refrigerant

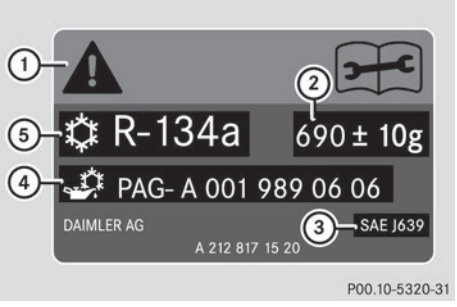
Important safety notes

❗ Only the refrigerant R-134a and the PAG oil approved by Mercedes-Benz may be used. The approved PAG oil may not be mixed with any other PAG oil that is not approved for R-134a refrigerant. Otherwise, the climate control system may be damaged.

Service work, such as topping-up refrigerant or replacing components, may only be carried out by a qualified specialist workshop. All applicable regulations must be adhered to, SAE standard J639 included.

Always have work on the climate control system carried out at a qualified specialist workshop.

Refrigerant instruction label



Example: refrigerant instruction label

① Warning symbol
② Refrigerant filling capacity
③ Applicable SAE standards
④ PAG oil part number
⑤ Type of refrigerant

Warning symbols ① indicate:

- possible dangers
- that it is necessary to have maintenance work carried out at a qualified specialist workshop

Filling capacities

All models	Capacity
Refrigerant	690 ± 10 g (24.3 ± 0.4 oz)
PAG oil	120 g (4.2 oz)

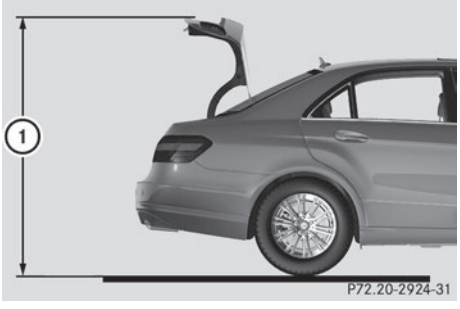
Vehicle data

General notes

Please note that for the specified vehicle data:

- the heights specified may vary as a result of:
  - tires
  - load
  - condition of the suspension
  - optional equipment
- the vehicle length specified includes the front license plate adapter.

Dimensions and weights



	① Opening height
Sedan	69.3 in (1760 mm)

E 400 HYBRID	
Vehicle length	191.9 in (4874 mm)
Vehicle width including exterior mirrors	81.5 in (2071 mm)
Vehicle height, Sedan	58.0 in (1474 mm)
Wheelbase	113.1 in (2874 mm)
Turning radius	36.9 ft (11.25 m)
Maximum roof load	220 lb (100 kg)
Maximum trunk load	220 lb (100 kg)

Publication details

Internet

Further information about Mercedes-Benz vehicles and about Daimler AG can be found on the following websites:

http://www.mbusa.com (USA only)

http://www.mercedes-benz.ca (Canada only)

Editorial office

You are welcome to forward any queries or suggestions you may have regarding this manual to the technical documentation team at the following address:

Daimler AG, HPC: CAC, Customer Service, 70546 Stuttgart, Germany

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